BRUHATH BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE ELECTRICAL DIVISION

Name of the work :- Detaild Estimate for Repairs and Improvements of Electrical installations of poles ,lights,cable in Ambedkar park ward no.02.

Budget Head:

Estimate No. LG/24.28

Est Cost Rs. **1000000.00**

Sl. No	SR Page No	Description	Unit	Qty	Rate	Amount
1	11/4.2.1	Fabricating, supplying and erection of ... ms long hot dip Galvanized Octagonal hot dip Pole with BSEN 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate with door opening arrangements, including suitable boards, Bakelite sheet and MCBs as per IS specifications suitable to withstand the wind speed of 47 m/s for .....m Pole in single section and single joint welded as per IS 9595/IS10178AWS having dimensions bottom ..... mm , top.... mm with 3 mm thick, suitable base plate and 4Nos of ..... long J bolts along with template and the Pole shall be hot dip galvanized in single dipping with not less than 65micron as per ASTM-A123 and 153 etc., (excluding foundation) as per drawing appended. 3 m - Top 70 mm and Bottom 130 mm dia	Each	2	6300	12600.00
2	46/ 11.8.5 CSR 2023-24	Supply of LED Streetlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate material, delivering superior light output Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, maximum light intensity should be between 60 degrees to 70 degrees. CCT > 5500K, IP66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/miss-wiring protection. Compatible for pole mounting with outer dia of 40mm to50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>1301m/w, nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/Lumileds/Osram makeLED Streetlight 120 W	Each	6	10060	60360.00

3	45/11.7. 4	LED Post Top Lantern GARDENSupply of LED pole mounting type post top lantern with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate/ clear glass material, delivering superior light outputRated life Burning Hrs 50000 hr@ Lumen Maintenance of 70%, CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor>0.9 with mains, Surge Protection- Min 5KV along with Over voltage/Overload, short circuit/ miss-wiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/1 EC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB LED Efficiency>1301m/w, nominal CRI >75. Luminaire manufacturer should have in- house facility accredited by NABL/CPRI & any Government certified agency & Design & velopment facility certified by ISO 9001:2008. Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED anufacturer & Cree/Nichia/Lumileds/Osram make LED Source. LED Post Top Lantern with 45 W	Each	35	11998	419930.00
	13/4.6.1	SupplyingandfixingofHotdipGalvanizedM.S.Bracketsuitableforoutdoor luminariesandmountedonOctagonalpoleusingnecessarybolts, nuts etc., completeSingle Arm Bracket with 1000 mm Standard 40/50 mm dia	Each	2	1700	3400.00
4	CSR 2023-24/56/13.6	Fixing charges of post top/ Gate/ Garden fitting /LED on the existing CI/ GI or any other pipe using required size of reducer, wiring using suitable wires.	Each	40	198.00	7920.00
5	52/174/21.05 CSR 2023-24	Laying of cable in Existing Trench/GI pipe/Stone Ware/RCC Hume pipe using Wooden/Aluminum Rollers as directed by the departmental staff.2.5 to 25 Sqmm LT Cable	KM	0.86	20886.00	17961.96
6	13/204/32.08 CSR 2023-24	1.1 kV, XLPE or Heat resistant PVC insulated, PVC exutruted Inner Seath Armoured LTUG Cable as per IS-1554 (Part 1) or IS-7098 Part-1, Armouring strip thickness and resistivity as per IS-3975. 25 Sqmm, 4 Core, (13 GI Strips - 4 x 0.8 mm)	KM	0.1	179844.00	17984.40
7	13/201/32.05	1.1 kV, XLPE or Heat resistant PVC insulated, PVC exutruted Inner Seath Armoured LTUG Cable as per IS-1554 (Part 1) or IS-7098 Part-1, Armouring strip thickness and resistivity as per IS-3975 16 Sqmm, 4 Core, (11 GI Strips - 4 x 0.8 mm)	KM	0.76	141842	107799.92
8	5/ 1.4.2 Vol-1 KPWD SR 2023-24	Earth work excavation by manual means for drains, canals, waste weir, draft, approach channels, key trenches, foundation of Buildings & bridges and such simillar works in all kinds of soils, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. Depth exceeding 1.5m, but not exceeding 3m	m^3	1.20	259.00	310.80
9	18/ 2.11 Vol-1 KPWD SR 2023-24	Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/ tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification. Buildings	Kgs	22.00	89.45	1967.90

10	15/ 2.1.3 Vol-1 KPWD SR 2023-24	Providing and laying in position Cement Concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machinery, curing, and all the other appurtenances required to complete the work as per technical specifications. Mix 1:3:6 Using 40 mm nominal size graded crushed coarse aggregates (15/ 2.1.3 Vol-1 KPWD SR 2023-24)	Cums	0.22	5989.00	1317.58
11	15/ 2.2.1 Vol-1 KPWD SR 2023-24	Providing and laying in position Cement Concrete for all Foundation works. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticizers laid in finished layers, well compacted using needle vibrators, including all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all the other appurtenances required to complete the work as per technical specifications. M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (15/ 2.2.1 Vol-1 KPWD SR 2023-24)	Cums	3.40	6287.00	21375.80
12	**CSR 2023-24/8/201/ 29.02**	Earth work excavation for pipeline trenches in all kinds of soils by mechanical means as per drawing and technical specifications, including setting out, construction of shoring, strutting, barricading, caution lights, bracing, using sight rails & bonding rods at every 100 mm wherever necessary as directed, removal of stumps and other deleterious matter, dressing of sides and levelling the bottom of trench to the extent required , utilising the available excavated earth locally for the work etc., and all other appurtenances complete in the following strata. All kinds of soils. Depth upto 1.50 m	m^3	**158**	**262**	41396.00
13	21/48.01 CSR 2023-24	1.1 kV Class HR (Heat Resistant) PVC Insulated & Sheathed Aluminium Single Core Lead wires as per IS-694: 2010 PVC Wire - 2.5 Sqmm Weight per 100 Mtr Coil: 1.8 Kg	Coil	4	1484.00	5936.00
14	23/51.04 CSR 2023-24	Rod type of earthing using 40 mm Dia, 3 Mtr long MS rod as ground rod, in earth pit of 300 mm width and 3300 mm depth and using 50x6 mm flat welded to ground rod as terminal & connected to equipment ground terminal using PVC Al wire as specified	No	2	2172.00	4344.00
15	20/5.4[illegible].1	Supply and Installation /Fixing/ Provision of Pole box with HRC Fuse /MCB provision and suitable connector/ terminal for 3Ph/1Ph connections with Loop-In&Loop-Out terminals for 10mm2/25mm 2 3.5 C Al /Ar/Cu/Ar Cable and branch out 2.5 mm2 2 core I/Cu PVC Insulated cable, enclosed in a Thermoplastic, Polystyreneen closure, which should be shock proof, safe, IP65 (WeatherProof), rustproof, dustproof ,waterproof having Internally Embedded Gasket with provision for cableen try through IP65 Thermoplastic, polyamide glands and/or grommets.200 mm x 200 mm x 98 mm	Each	24.00	2300	55200.00
16	20/5.42.2	Fabricating supplying and mounting MS box made out ....SWG suitable for floor /wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 7tanks treatment with powder coated paint and finally finished with approved colour etc., complete. 16Swg	cm 2	19000	0.43	8170.00
17	20/5.41.2 CSR 23-24	Supplying and fixing angle iron frame work fabricated out of M.S.angle iron.. and M.S. Flat.....with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint.50 x 50 x 6 mm	m	5	395.00	1975.00

18	21/5.47	Supplying and fixing Microprocessor based Electronic timer (without contactor, Din Mounting using necessary bolts, nuts and washers etc.,) 3-120sec setting	Each	2	2315	4630.00
19	16/5.14.6 CSR 23-24	Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947.95/100 A	Each	2	16606.00	33212.00
20	17/5.15.9 CSR 23-24	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts, necessary phase separators, handle and wiring complete. Protection of Overload and Short circuit in Thermal Magnetic Release. Micro processor release shall have Earth Fault as per IS-13947. (Icu=100% Ics). In 4P MCCB, all Poles should have protection for Short-Circuit/Over Load.For Microprocessor MCCBS Facility for segregating Priority and Non-Priority loads must be available in the MCCB. MCCB shall be provided with double insulation (insulation between front cover and internal power circuits to avoid any accidental contact with live current carrying path with the front cover open). Multi-pole breakers shall be designed to break all the poles simultaneously and they shall have a single mechanism.FOUR POLE100Amps 25kA.	Each	1	8487.00	8487.00
21	17/5.18.1 CSR 23-24	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.6-32Amps SP	Each	2	415.00	830.00
22	**CSR 2023-24/3.9**	Supplying and fixing hylum plastic sheet 3mm thick with necessary nitches for fixing switches, regulators etc., and fixing on existing wood or metal box using N. F. screws	cm2	3690	0.35	1291.50
23	30/66.04 CSR 23-24	Optical Fibre Cable (OFC) and its Accessories.HDPE/PLB Pipe 50/42 mm	Km	0.1	85014.00	8501.40
		Total				846901.26
		Add 18 % GST on Total				**152442.23**
		Miscellaneous				**656.51**
		Grand TOTAL				**1000000.00**

CERTIFICATE

1. The Place was inspected and work is essential.
2. The Provision made in the estimate is adequate and are necessary.
3. The Work comes in the BBMP limit and is legitimate charges on the Corporation Funds.
4. The rates in the Estimate is based on CSR 2023-24 , KPWD Vol-1 CSR 2023-24 and Approved Rates.

Asst./Junior Engineer (Elec)

Asst. Exe.Engineer (Elec)

Sub-Division No.

Bruhat Bangalore Mahanagara Palike

EXECUTIVE ENGINEER (ELEC)

YELAHANKA DIVISION

BRUHAT BANGALORE MAHANAGARA PALIKE

Administrative Sanction for Rs. 10,00,000/-
Rupees TEN LAKHS only
is accorded under head PO298 Maint & Electrical Installations in Parks and Gardens Play Ground,
Registered as EE No. 30/24-25 Subject to conditions contained in enclosed memo No. BBMP/EE(el)/42/AS/30/24-25
Dt 08-11-2024

Executive Engineer

TECHNICALLY SANCTIONED FOR Rs. 10,00,000/-
Rupees Rupees TEN LAKHS only
Under PO298 Maint & Electrical Installations in Parks Gardens
Registered as EE ( ) No. 07/24-25
Subject to conditions contained in enclosed memo EE ( ) No. BBMP/EE(el)/42/AS/30/24-25
Dt 08-11-2024
Estimate A/ Sanctioned for 2024-25
Dated 08-11-2024 Rs. 10,00,000/-

Executive Engineer